

ABSTRACT

A self-contained power generator comprises a fuel source, a solid oxygen source capable of releasing oxygen when heated, an engine capable of generating power by combusting the fuel with the oxygen so as to produce exhaust gases, and an exhaust gas absorbent. The oxygen source and the exhaust gas absorbent are preferably combined. The oxygen source may comprise potassium superoxide in combination with sodium peroxide, potassium oxide, or calcium oxide. The engine may be any known heat engine. Fuel is fed to the engine at a desired rate so as to generate power at a desired rate. Heat from said combustion is preferably applied to the oxygen source and heat may be exchanged between the exhaust gases and oxygen. The exhaust gases are preferably absorbed at substantially the same rate as the rate at which they are generated such that pressure in the generator does not increase.